JPL CONTRACTOR SAFETY AND HEALTH NOTIFICATION

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It is the contractor's responsibility to ensure that all employees and subcontractors are provided a safe and healthful work environment. In the State of California, there are numerous regulatory requirements which mandate this, including the California Code of Regulations (CCR) and the California Health and Safety Code. Additionally, NASA/Jet Propulsion Laboratory (JPL) establishes it's own high standards of safety as delineated herein. The knowledge of and compliance with applicable JPL and regulatory standards shall be considered fundamental for any contractor that proposes to engage in operations at JPL.

The following notification is provided to contractors prior to bidding on work at JPL and will be reviewed with the selected contractor prior to starting work. This notice is designed to inform contractors, their employees and subcontractors, of applicable occupational safety and health requirements. Contractors shall review all applicable portions of this document with their employees and subcontractors prior to starting any work. This notification represents a listing of safety and health requirements but may not be comprehensive. It is recognized that potential hazards and specific application of regulations will vary. Failure of a requirement to appear within this document does not relieve the contractor of knowledge and compliance.

I. REQUIRED DOCUMENTATION

<u>NOTE</u>: At the pre-construction/pre-start briefing, applicable (checked) items of the following list of documents will be discussed. Contractor shall provide copies of all applicable documentation, prior to starting work.

- ☑ 1. Injury and Illness Prevention Program (IIPP), including documentation forms. (CCR, Title 8, Section 3203)
- ☑ 2. Hazardous Communication Program. (CCR, Title 8, Section 5194)
- Site specific safety plan, detailing procedures for your site specific activities. (CCR, Title 8, Sections 3203 & 1509)
- ≤ 4. Site specific permits required, such as trenching and shoring, (CCR, Title 8, Section 1503); confined space entry, (CCR, Title 8, Section 5157); asbestos abatement notification, (CCR, Title 8, Section 1529)
- ☑ 6. Medical approval to wear respiratory protection. (CCR, Title 8, Section 1531, 5144)
- ☑ 7. Medical approval to work with, but not limited to asbestos, cadmium and lead. (CCR, Title 8, Section1529, 1532 & 1532.1)

II. REQUIRED COMPLIANCE ISSUES (applicable to all contracts)

A. GENERAL

- Contractor shall conduct on-site safety meetings at least every ten working days with employees and onsite subcontractors to review all hazardous operations and address mishaps. The meeting minutes and sign-in sheet shall be maintained by the contractor, on-site and copies given to the cognizant JPL representative. (CCR, Title 8, Section 1509)
- 2. The contractor is responsible for briefing all subcontractors of site specific hazards prior to the subcontractor starting any site work for the first time. (CCR, Title 8, Section 1510)
- 3. Personal protective equipment such as hard hats, eye protection, foot protection, hearing protection, respirators, etc., shall be worn as required. (CCR, Title 8, Sections 1514-1522)

- 4. The contractor is responsible for providing all required safety equipment including, but not limited to, fire extinguishers, personal protective equipment, fall protection, etc., unless otherwise specified in the JPL contract. (CCR, Title 8, Section 1514 and JPL requirement)
- 5. The contractor is responsible for maintaining a safe job site perimeter and for providing traffic controllers for both vehicle and pedestrian traffic when the normal traffic pattern is interrupted by construction activities. Traffic controllers and all other contractor employees working in roadways shall wear high-visibility vests. The contractor shall provide necessary barricades, hazard warning tape, traffic signs, and trench cover plates for pedestrians and vehicles. The contractor shall also provide shielding to protect from hazards such as arc welding, concrete breaking or grinding operations. (CCR, Title 8, Sections 1598 & 1599)
- 6. The contractor is responsible for maintaining all building and work-site exit-ways in a safe manner, orderly, free of clutter and tripping hazards, to ensure the minimum code required access to all emergency exits. (CCR, Title 8, Section 1513)
- 7. All materials and tools shall be properly stored. Food waste must go in a covered, secure trash can provided by the contractor. The contractor shall also provide appropriate containers for, and legally dispose of all other wastes. The contractor is not permitted to use JPL trash bins. (CCR, Title 8, Section 1513 and JPL requirement)
- 8. Electrical layout and use of electrical power on the construction site must conform to the applicable Electrical Safety Code. GFI protection shall be provided by the contractor. All extension cords and electrical tools shall be maintained in good condition and have a ground pin or be double insulated. (CCR, Title 8, Section 1760)
- 9. Any use of JPL owned emergency equipment and fire hydrants for other than emergency purposes is prohibited, unless specific approval is first obtained from the cognizant JPL representative. (JPL requirement)
- 10. Any work involving the modification of, connecting to, or turning off of a JPL fire alarm or fire suppression system must be pre-approved through the cognizant JPL representative. (JPL requirement)
- 11. All power and hand tools must be in good working order and used solely for their intended purpose. (CCR, Title 8, Sections 1680-1708)
- 12. When the use of powder actuated tools is allowed by JPL, tools must be kept in a closed locked box when not in use. Operators of powder actuated tools must be trained and certified in their use by their company. (CCR, Title 8, Sections 1684-1692)
- 13. Air tanks over 1.5 cu. ft., used in compressed air systems must have a current permit on display. All hoses used in compressed air systems shall be in good condition, properly secured and inspected for defects by the contractor prior to use. (CCR, Title 8, Section 461-466)
- 14. Contractor employees or subcontractors shall not ride in the back of trucks or as passengers on forklifts. All motorized equipment such as forklifts, trucks, loaders, graders, backhoes, etc., shall be inspected daily and equipped with a functional back-up alarm. (CCR, Title 8, Section 1597 and JPL requirement)
- 15. Hazardous material/chemicals and gases are used throughout the JPL facilities. Contact the cognizant JPL representative for an inventory of these materials and safety precautions to be followed when working around them. The JPL Safety Operations Section will handle requests made by the contractor for Material Safety Data Sheets (MSDS) related to materials/chemicals used by JPL. (CCR, Title 8, Sections 1510 and 5194)
- 16. There are numerous underground utility systems located throughout the JPL facilities carrying 16.5 KV power, telephone, data communications, natural gas, high pressure gaseous nitrogen, liquid nitrogen, compressed air, etc. The contractor shall review all underground utility drawings with the cognizant JPL representative prior to any excavation or trenching operations. (CCR, Title 8, Section 1511)

B. EMERGENCIES AND ACCIDENTS

- In the event of an emergency, dial 911 (Oak Grove Facility only). Be prepared to provide the following information to the operator: your name, the nature of the problem and the location. Stay on the line until you are told to hang up. The operator will then notify the JPL Fire Department and they will dispatch the appropriate emergency personnel to the site. If the contractor has a non JPL phone, then dial (818) 393-3333 and follow the above procedures. (CCR, Title 8, Section 1512 and JPL requirement)
- In the event of a mishap involving a personal injury or property damage, the contractor must notify the
 cognizant JPL representative immediately. A thorough investigation report must be completed by the
 contractor within 24 hours and a copy of that investigation report must be provided to the cognizant JPL
 representative. (JPL requirement)
- One or more contractor employees present on the job site shall be trained in first aid/CPR. (CCR, Title 8, Section 1512).

III. CONTRACT SPECIFIC COMPLIANCE ISSUES

<u>NOTE</u>: At the pre-construction/pre-start briefing, applicable (checked) items of the following list will be discussed in detail.

A. CHEMICALS/HAZARDOUS MATERIAL USE

- 1. Before chemicals/hazardous material are brought on to the JPL site, MSDS must be submitted by the contractor to the cognizant JPL representative for approval. MSDS will be reviewed by the JPL Safety Operations Section for approval. (CCR, Title 8, Section 5194)
- ∑ 2. The MSDS must be available at the job site and employees shall be trained in their use. (CCR, Title 8, Section 5194)
- ☑ 3. All chemical/hazardous material containers must be properly labeled with the contents and the
 appropriate hazard warning. Hazardous material will be handled, transferred and stored with
 appropriate warning signs. (CCR, Title 8, Section 5194.)
- ☑ 4. All chemical/hazardous material containers must be in good condition and have no leaks. Containers shall be kept closed when not in use. When required, provisions shall be made for secondary containment. (CCR, Title 8, Section 5164)
- ∑ 5. The contractor will immediately report all spills to the cognizant JPL representative. If the spill results in an immediate hazard to personnel or property, the contractor shall call the JPL Emergency number for assistance. The contractor is responsible for containing and cleaning up all spills when directed. (JPL requirement)

B. ASBESTOS/LEAD CONTAINING MATERIAL

- 1. Asbestos and lead is present in many buildings at JPL. It is the responsibility of the contractor to ensure that all precautions are taken to avoid exposure of contractor as well as JPL employees to these materials. (CCR, Title 8, Sections 1529, and 1532.1)
- ☑ 2. The contractor and all subcontractors are responsible to meet regulatory and JPL specified requirements and to comply with practices established by the asbestos and lead abatement/consulting industry when working in these areas. Work shall be in strict accordance with permit requirements and the contractor's approved abatement plan. (CCR, Title 8, Sections 1529 & 1532.1)
- ☑ 3. Contractors doing work that could disturb asbestos or lead material must provide JPL with proof of current, certification (as required) and the appropriate level of asbestos and/or lead training prior to starting work. (CCR, Title 8, Sections 1529 & 1532.1)
- ☑ 4. Contractor personnel who are exposed to asbestos/lead containing material shall wear appropriate personnel protection, be on a Medical Surveillance Program, and shall provide medical surveillance and respirator training/fit test records on request. (CCR, Title 8, Sections 1529 & 1532.1)

- ∑ 5. Contractors are responsible for providing exposure assessments for their own employees and, upon request, provide the cognizant JPL representative with copies of laboratory analysis reports. (CCR, Title 8, Sections 1529 & 1532.1)
- ☑ 7. Contractors who discover PACM and/or ACM shall notify the cognizant JPL representative within twenty four hours of the location and quantity. (JPL requirement)
- ⊠ 8. Contractors are responsible for providing area/clearance monitoring reports to the cognizant JPL representative prior to re-occupancy.

C. HOT WORK

- ☑ 1. Prior to starting any hot work (e.g. welding, cutting, tar kettle use or other significant ignition source), a
 hot work permit must be obtained from the JPL Fire Department. (CCR, Title 8, Section 4848)
- ☑ 2. When stipulated as a permit requirement by the JPL Fire Department, the contractor shall provide a
 qualified fire watch with the appropriate equipment such as: fire extinguisher, hose, light curtains, fire
 blankets, ventilation, etc. (CCR Title 8, Section 4848)
- ☑ 3. All hot work equipment must be in good condition and used per applicable Cal/OSHA regulations and JPL Fire Department permit requirements. All contractor personnel operating such equipment must be trained and qualified. (CCR Title 8, Section 4848)

D. TRENCHES AND EXCAVATIONS

- ☑ 1. Digging, trenching or excavation of any depth must be pre-approved by the cognizant JPL representative prior to the activity to avoid contact with utility lines, pipes, building foundations, etc. (JPL requirement)
- ☑ 2. Prior to digging a trench five feet or deeper, the contractor shall provide the cognizant JPL representative with a copy of their Cal/OSHA Annual Permit and Written Notice to Dig. (CCR Title 8, Section 1503)
- ☑ 3. A trenching and shoring plan may be required for trenches and excavations deeper than five feet, if requested by the cognizant JPL representative. The plan shall be completed and signed by a civil engineer, licensed in the State of California, and submitted to the cognizant JPL representative prior to performing trenching or excavating operations that could affect adjacent structures, improvements or areas that workers will be required to enter. (CCR Title 8, Section 1541.1)

E. ELEVATED WORK SURFACES

- 1. A copy of the contractor's current Cal/OSHA permit for all scaffolding (erection or dismantling) over 36 feet shall be submitted to the cognizant JPL representative and a copy of the permit shall be posted at the job site. (CCR Title 8, Sections 1635.1 & 1503)
- ☑ 2. All scaffolds must be erected, used and dismantled in a safe manner and in accordance with the manufacturer's recommendations, procedures and Cal/OSHA regulations. Guard rails, mid rails, toe boards, access ladders, planking, bracing and out-riggers shall be implemented as required by regulations. (CCR Title 8, Section 1637)
- ☑ 3. Fall protection shall be utilized when erecting and dismantling scaffolds over six feet above grade. (CCR Title 8, Section 1670)
- ☑ 4. Contractor employees shall utilize fall protection consisting of a 5-point body harness and lanyard with locking snap hook and soft stop as required when a fall of six feet or more may occur, except off of ladders and/or platforms with appropriate guardrails. Additionally, JPL requires 100% tie off for all

- operations above six feet. (CCR, Title 8, Section 1670 and JPL requirement)
- ☑ 5. Only ladders of appropriate size and in good condition shall be used. Non-metallic ladders shall be used for electrical work. (CCR, Title 8, Section 1675)

F. LIFTING & ELEVATING OPERATIONS

- ☑ 1. Plans for lifting and elevating operations, including the completion of a 'Lift Permit' and a 'Pre-Lift Worksheet', shall be submitted to the cognizant JPL representative for review and approval a minimum of five working days in advance of contemplated lift. This will allow time for review of plans and for publishing notices where closure of a roadway may be required. (JPL requirement)
- ☑ 2. Prior to any lifting operation utilizing a crane, the contractor shall check for: current crane certification, operator certification, crane inspection log, and review 'Pre-Lift Worksheet' with all personnel engaged in the lifting operation. (CCR Title 8, Section 5006)
- ☑ 3. Manufacturer's load charts must be posted and shall be easily readable on all cranes. (CCR Title 8, Section 5022)
- ☑ 4. All associated lifting devices such as slings, hooks, fixtures, ropes, chains, wire ropes, etc., shall be inspected prior to use, in good condition and properly labeled with load ratings, when required. (CCR, Title 8, Section 5031)
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- ☑ 6. The contractor is responsible for maintaining a safe perimeter around all lifting and elevating operations. All roadways and personnel access points in or near the lifting operation must be blocked or cordoned off and contractor personnel posted at the periphery of posted areas to prevent pedestrians from entering into the hazard zone. (CCR, Title 8, Section 4991)

G. CONFINED SPACE ENTRY

- All contractors performing confined space entry work shall submit a copy of their confined space entry program to the cognizant JPL representative for review and approval prior to starting work. (CCR, Title 8, Section 5157 and JPL requirement)
- ☑ 2. The contractor shall provide notice to the cognizant JPL representative 24 hours in advance of scheduling entry into a confined space. (JPL requirement)
- ☑ 3. Contractor shall be responsible for testing, classifying and permitting their own spaces, as well as providing the appropriate test equipment and standby rescue personnel and equipment. (CCR, Title 8, Section 5157 and JPL requirement)

(PROJECT I.D.#)

CONTRACTOR ACKNOWLEDGMENT

Pre-Construction/Pre-Start Briefing

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all applicable requirements. Con all employees and subcontractors	ne Contractor Safety and Health Notification and agrees to comply with tractor shall maintain a copy of this signed notification and shall inform as performing work at JPL concerning the applicable safety and health has been informed of all known/potential hazards at JPL and has been dures.
Date: Co	ompany Name (typed):
Signature of Authorized Represe	entative:

Typed Name & Title of Authorized Representative: